

# **FILTER ELEMENT**

**ADVANCED  
TECHNOLOGY FOR  
MAXIMUM SAFETY  
AND EFFICIENCY OF  
HYDRAULIC CIRCUITS**



**PASSION TO PERFORM**



# TYPES OF FILTER ELEMENTS

MP Filtri offers different solutions, according to specific filtration needs

A

## MICROFIBRE



State of the art hydraulic filtration, guaranteeing the best performance. Also available in the zerospark® (antistatic) configuration.



WA

## WATER ABSORBER



Used in combination with microfibre to absorb free water in hydraulic oils



P

## PAPER

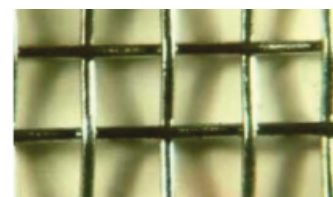


Smart solution for applications where high filtration efficiencies are not required.



R

## WIRE MESH



Used for heavy-duty applications in terms of mechanical strength and temperature. Used in suction filters to minimize pressure drop.



# THE CONCEPT

PET layer for external protection of the filter element assembly during installation and service. The design ensures an effective open area for maximum flow capacity. Customer-specific logo adaptations are possible.

Enhanced protection of the element assembly from differential pressures is provided by the perforated inner support tube ensuring the integrity of the filter element pleat pack therefore preventing its collapse.

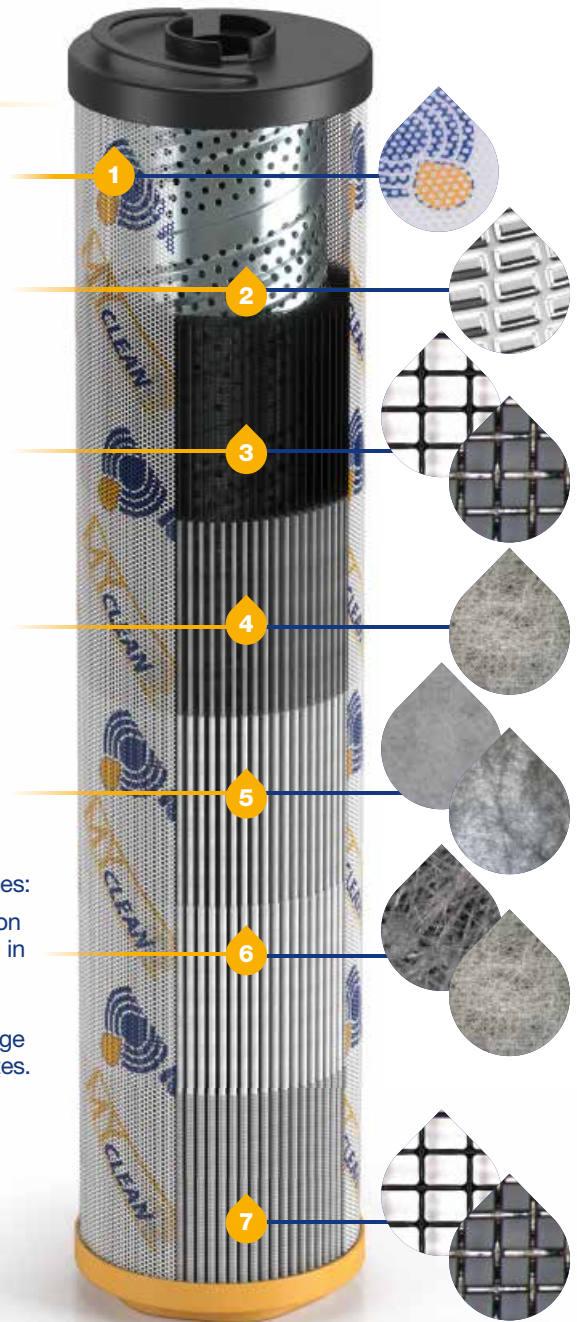
Metal mesh for internal support of the filter medias to maintain the integrity of the overall element pleat pack. The mesh is available in stainless steel, or carbon steel with epoxy resin coating.

Polyester downstream layer support for protection of the filter media pleat structure.

Primary microfibre filtration 1000 beta efficiency for ultra-fine and fine applications ensuring maximum dirt holding capacity combined with low pressure drop characteristics.

External pre-filtration layer made of synthetic fibres available in two types:

- polyester material for protection of filter medias manufactured in microfibre;
- microfibre material for elements retaining large size solid particulates.



External metal mesh support for protection of the filtration medias from flow and pressure fluctuations and also to protect the integrity of the element's pleated structure.



**X THE SOLUTION WITH POLYGONAL CONNECTION AND DEDICATED SEAL**



BASE ENDCAP

SPIRAL TUBE

FILTER MEDIA

SPIGOT ENDCAP



Brochure  
MyClean  
& zerospark®

## zerospark®

**Z THE ANTISTATIC SOLUTION TO ELIMINATE THE PROBLEM OF ELECTROSTATIC DISCHARGES IN HYDRAULIC FILTERS**

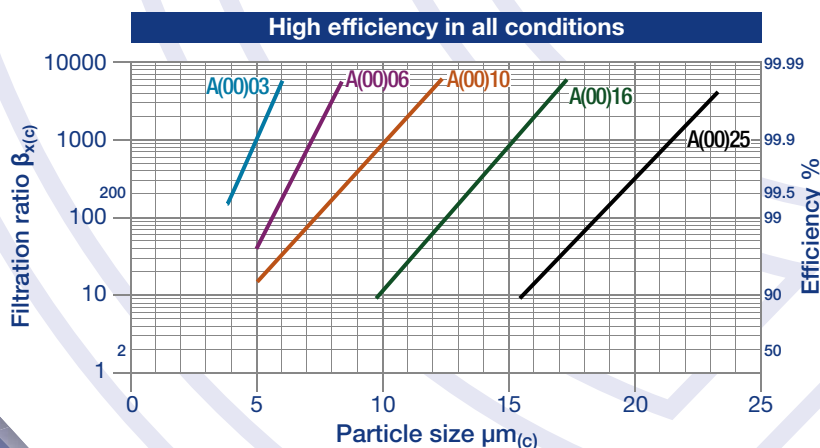
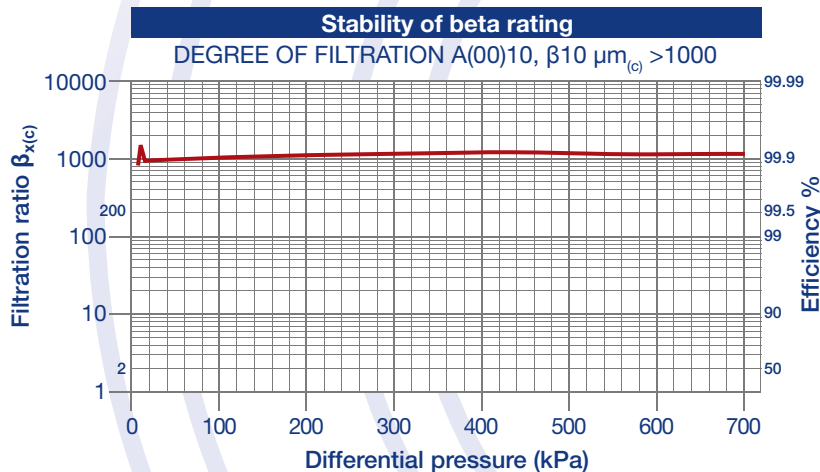
# GUARANTEED PERFORMANCE

## MULTI-PASS ISO 16889

The ISO Multipass test evaluates the characteristics (or performance) of a filter element, providing data on efficiency and capacity.

ISO standard filtration compared	
$\beta_{x(c)} > 1000$ ISO 16889	Filter media code MP Filtri
5 $\mu\text{m}_{(c)}$	A(00)03
7 $\mu\text{m}_{(c)}$	A(00)06
10 $\mu\text{m}_{(c)}$	A(00)10
16 $\mu\text{m}_{(c)}$	A(00)16
21 $\mu\text{m}_{(c)}$	A(00)25

$$\frac{\text{Upstream particles number} > X \mu\text{m}_{(c)}}{\text{Downstream particles number} > X \mu\text{m}_{(c)}} = \beta_{x(c)}$$



## LABORATORY

Laboratory  
MP Filtri c/o HQ, Italy



**ISO... We follow ISO standards to the letter to guarantee you only the best in our products!**

At MP Filtri, we are constantly engaged in research, development and innovation. R&D teams use state-of-the-art test benches to certify the performance and function of filters and filter elements, while detailed technical analysis reveals the level of solid particle contamination in the tested oils.

### Our R&D centre includes:

- 15 test benches
- 8 instruments for analysing oil contamination
- 13 tests in accordance with ISO standards
- 36 different types of tests and over 1000 tests per year
- Specialised training areas
- Comfortable meeting rooms and study areas
- Customer training courses that alternate theoretical frameworks to practical experimentation on test benches

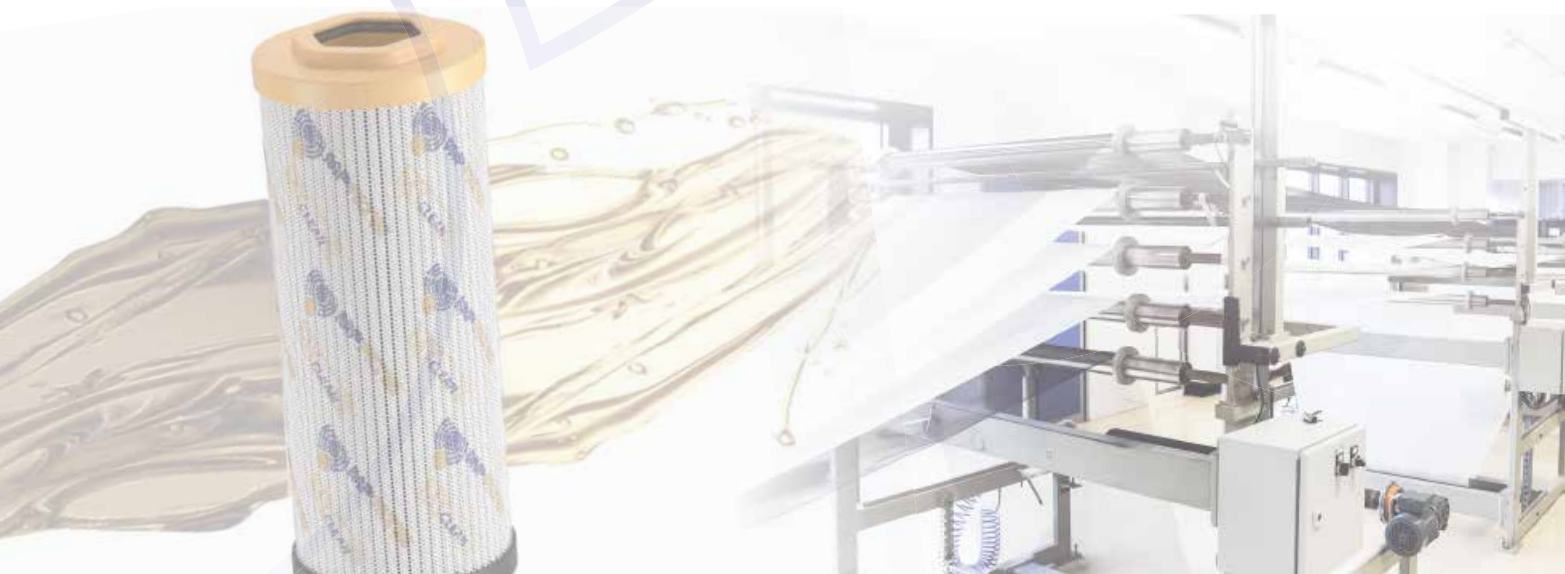


# CHOOSE OUR FILTER ELEMENTS IT'S SIMPLE



FAMILY ELEMENT FILTER	TYPE	MATERIAL SPIGOT ENDCAP	MATERIAL SEALS	BYPASS CALIBRATION (bar) +/-10%	FLOW RATE MAX single filter element (l/min)	WORKING TEMPERATURE (°C)	FILTRATION DEGREE (µm)	Δp COLLAPSE (bar)	FILTER FAMILY TYPES							
									SUCTION	RETURN	RETURN / SUCTION	SPIN-ON	LOW-MEDIUM PRESS.	HIGH PRESS.	STAINLESS STEEL	ATEX
MICROFIBRE RETURN	A	Polyamide	NBR FPM MFQ	1.75 ÷ 4.5	3.169	-25 ÷ +110	3 6 10 15 25	10 8 (RFEX) 5 (Spin-On)	-	√	√	√	-	-	-	-
MICROFIBRE IN-LINE	A	Polyamide	NBR FPM MFQ	N.A. included in the head of the filter 3.5	1.993	-25 ÷ +110	3 6 10 15 25	20 8 (LFEX) 5 (Spin-On)	-	-	-	√	√	-	-	-
MICROFIBRE HIGH PRESSURE	A	Polyamide Steel	NBR FPM MFQ	N.A. included in the head of the filter 6.0	569	-25 ÷ +110	3 6 10 15 25	210 20	-	-	-	-	-	√	-	√
MICROFIBRE HIGH PRESSURE STAINLESS STEEL	A	Polyamide Steel Stainless steel	NBR FPM MFQ	N.A. included in the head of the filter 6.0	160	-50 ÷ +120 depending on the seal	3 6 10 15 25	210 20	-	-	-	-	-	-	√	√
MICROFIBRE WATER REMOVAL	WA	Polyamide Steel	NBR FPM	N.A. included in the head of the filters 3.0 and 3.5	895	-25 ÷ +110	25	20 10 8 (RFEX)	-	√	-	-	√	-	-	-
PAPER	P	Polyamide Steel	NBR FPM	1.75 ÷ 4.5	3.378	-25 ÷ +110	10 25	10 8 5 (Spin-On)	√	√	√	√	-	-	-	-
PAPER REINFORCED	R	Polyamide	NBR FPM	N.A. included in the head of the filter 3.5	727	-25 ÷ +110	10 25	20	-	-	-	-	√	-	-	-
WIRE MESH	M	Polyamide Steel	NBR FPM	0.3 ÷ 4.5 included in the head of the filter 6.0	3.517	-25 ÷ +110	25 60 90 250	210 20 10 8 (Elixir) 5 (Spin-On)	√	√	√	√	√	√	√	√

NBR = Nitrile / FPM = Fluoroelastomer / MFQ = Fluorosilicone



# WORLDWIDE NETWORK

CANADA ♦ CHINA ♦ FRANCE ♦ GERMANY ♦ INDIA ♦ SINGAPORE  
UNITED ARAB EMIRATES ♦ UNITED KINGDOM ♦ USA



PASSION  PERFORM

in   



[mpfiltri.com](http://mpfiltri.com)

MP Filtri reserves the right to make modifications to the models and versions of the described products at any time for both technical and/or commercial reasons. For updated information please visit our website: [www.mpfiltri.com](http://www.mpfiltri.com). The colors and the pictures of the products are purely indicative. Any reproduction, partial or total, of this document is strictly forbidden. All rights are strictly reserved.

MF002000070  
EN - 2024.07